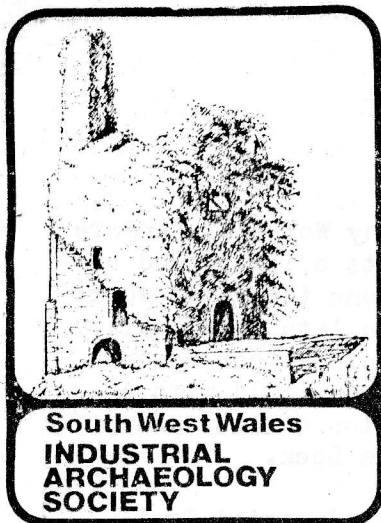




SOUTH WEST WALES INDUSTRIAL ARCHAEOLOGY SOCIETY

BULLETIN

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CYMDEITHAS ARCHAEOLEG DIWYDIANNOL DE ORLLEWIN CYMRU

Newsletter 30, February 1982

Editorial Committee: F.G. Cowley, P.R. Reynolds, W.I. Roberts

Price to non-members: 20p

FORTHCOMING EVENTS

18 MARCH

Annual General Meeting. Will members please take this as the formal notification of the meeting. If you wish to raise any matters, please give notice to the Hon. Secretary, Mr W.I. Roberts, Grove Cottage, Gloucester Place, Mumbles, Swansea by 11 March 1982.

15 APRIL

Mr P.G. Rattenbury
Tramroads of the Swansea Region

These meetings will be held in the Royal Institution of South Wales (Swansea Museum) and will both start at 7.00 p.m.

13TH ANNUAL CONFERENCE OF WESTERN I A SOCIETIES

Every Spring industrial archaeology & local history societies in Wales and the west of England hold a conference to discuss matters of common interest and to hear reports of one another's doings. This year the SWWIAS has offered, or been dragooned into arranging the conference, which will be held on SATURDAY 3RD APRIL in the University College of Swansea. Fuller details are to be found on the enclosed form.

In previous years about 150 participants have been present, and we hope that we will be able to attract something like that number again. We do hope that there will be strong local support for this event, both to help ensure the success of the conference and to show our visitors that IA can flourish in this part of the world. Please do come if you possibly can

ANNUAL SUBSCRIPTIONS

Annual subscriptions are now due. If you have not already paid, either directly or by banker's order, the Treasurer would be glad to receive your remittance in the not too distant future. Rates remain unchanged at £2-00 (standard), £3-00 (family) and £1-00 (students and OAPs). Please note that the Treasurer is now at a new address:

Paul Reynolds,
87 Gabalfa Road
Sketty
Swansea SA2 8ND

(Telephone 205888)

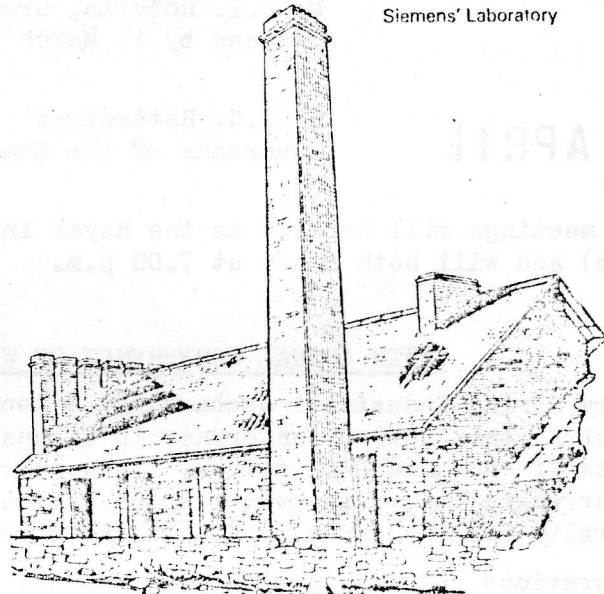
Payment by banker's order is a simple and reliable method of payment: if you would like to consider this method, please let the Treasurer know, and he will send you the necessary information and form.

SIEMENS' LABORATORY
The Latest Developments

By F. G. Cowley

The laboratory is all that remains of the Siemens Steel Company Works at Landore which was set up in 1869 and came to an end in 1888. Despite its brief period of operation, the works has a number of claims to fame. It was among the first works in Britain to use the open-hearth process of converting pig-iron into fine quality steel. After the works was enlarged in 1871 on a site across and farther up the river, it was accounted one of the four largest steel works in the world with a weekly output of 1000 tons. Much of the steel produced was of top quality and was used for the Forth Bridge and for warships built at Pembroke Dock.

When in 1975 this society published its Lower Swansea Valley Industrial Trail, it gave particular prominence to the building which housed the laboratory and expressed the hope that it might be preserved as one of the major industrial monuments of the Valley." The pen-and-ink drawing which was included in the trail was based on a recent photograph and gave a fairly accurate idea of the state of the building at that date. The basic structure was then sound although it was in a considerable state of disrepair. The Society wrote to the Department of the Environment's Inspector of Ancient Monuments asking for the building to be listed and this request was granted in December 1975. The Society also sent a letter to the City Council suggesting that future deterioration of the building could be prevented by bricking up doors and windows to discourage vandals. It was then announced by the Council that £1500 was to be spent on selective demolition. The northern bay with its distinctive range of eight chimney stacks was to be preserved while the other walls were to be demolished to window level to leave a recognisable layout. This work was not carried through.



In the following years a number of functions was suggested for the laboratory building in the event of its being restored. It was suggested that it might be used as an information centre to serve the proposed recreation area or as an interpretative centre which could cater for educational visits from schools.

Meanwhile the building was deteriorating rapidly. In February 1981 a security fence was erected around the now dangerous building and it was decided at the City Council's Leisure Services Committee to offer the building to the Secretary of State to preserve as an ancient monument at his cost not the City's. Our Society made representations at this time and pleaded that positive action should be taken to preserve at least the most distinctive part of the building. Strong support for the preservation and restoration of the building also came from the Lower Swansea Valley Development Group (on which our own Society has representation), from Siemens Ltd (the Sunbury-on-Thames firm of electrical engineers), from Morganite Electrical Carbon and from Plaid Cymru. In January 1982 it was announced that Swansea City Council had applied to the Welsh Office for consent to demolish the laboratory building and this request was backed by the Planning Committee of West Glamorgan County Council.

There was a full discussion of the future of the Siemens building at the last meeting of the Lower Swansea Valley Development Group held on 19 January and the general feeling was that the chimney end of the building could be preserved and possibly integrated into a new building which could provide a small meeting place or changing rooms for the adjacent playing fields. Morganite Electrical Carbon would be prepared to sponsor a Manpower Services Commission project to restore the building. A meeting is now being sought by the LSVVG with the Chief Executive, Town Clerk, Leader of the City Council and Director of Planning in order to prevent demolition and to agree on a plan for saving at least part of the Siemens laboratory building.

OTHER NEWS

Venallt Ironworks. A scheme to restore Venallt Ironworks (at Cwmgwrach, between Resolfen and Glynneath) is currently being carried out by West Glamorgan County Council with the support of the Historical Metallurgy Society. Venallt is one of only two sites in south Wales where remains survive of works built to use Crane's hot-blast process of producing iron with anthracite. It opened in 1839-42 and now lies on Forestry Commission land. The furnace itself was demolished long ago when the site was converted to a patent fuel works, but a massive slag block with tuyeres survives together with the furnace platform, a stack base and a roofless engine house. This last feature is a particular feature of the site, but was threatened with demolition until the scheme was proposed. It is now intended to restore it as an ancient monument using labour from an unemployment relief scheme, but the money available for materials is insufficient: there is a deficit of at least £4250 which has to be raised.

The project organiser, Dr Martin Cahn, would welcome any contribution, either financial or in kind, and also voluntary help on site. Donations should be made to the Historical Metallurgy Society Ltd, Venallt Fund, and sent to him at 1 Curlew Close, Mayals, Swansea SA3 5HG. If you could possibly help on site, please let him know and he will arrange for you to be kept informed.

The site lies on Heol Wenallt, Cwmgwrach, near Glynneath (map ref. SN 865050). Visitors to the site are welcome but they should note that the remains are dangerous at present, and that they visit the site at their own risk.

Mumbles Railway Restaurant. In our last issue we suggested that if Corporation plans to convert the former Blackpill station into a restaurant went ahead, then it might be a good idea for it to include a permanent display of Mumbles Railway photographs. Mr Ron Lawson, of the Mumbles Railway Publishing Ltd., now tells us that there are already plans, and well advanced plans too, for a Mumbles Railway restaurant, in the Bay View Hotel at St Helens. The Bay View has stood beside the line of the railway at the Slip junction for 91 years, and old photographs often show the hotel as a background for the railway. Mumbles Railway Publishing has supplied a range of enlarged photographs to the hotel, and the restaurant should soon be open.

Swansea Canal. The latest issue of the newsletter of the Swansea Valley Historical Society (no. 14, Winter 1981) reports on restoration work being undertaken by the Swansea Canal Society which was formed last April. At Ystalyfera work has commenced on the very fine aqueduct over the river Twrch, volunteer parties have been clearing away rubbish, trees, ivy, weeds, etc that hide the structure, the bed of the aqueduct has been cleaned and its cement/mortar lining exposed.

Lower down the canal at Ynysmudw, the masonry of two locks has also been exposed, including interesting features such as inclined stones used as foot grips and machinery used to control the sluice gates. At the upper lock, following much hard work, the overflow channel has been cleared, and the canal can now be diverted down the channel for the first time since the 1930s. Also at Ynysmudw a long-lost barge was discovered buried in the canal bank, but so far its history remains obscure.

The Secretary of the Swansea Canal Society is Mr B. Jones, 47 Waun Penlan, Rhydyfro, Pontardawe, Swansea.

LOUGHOR VIADUCT

By Stephen K. Jones

The Loughor railway viaduct near Swansea is one of the few remaining viaducts still in use with a timber substructure. Less well known than the Barmouth estuary bridge or the Moy viaduct near Inverness, it is the only existing timber viaduct designed by Isambard Kingdom Brunel. Forming part of the original South Wales Railway and still a mainline viaduct on the Swansea to west Wales route, it was completed for the opening of the line from Landore to Carmarthen on 11 October 1852.

Brunel, as the designer of the SWR, was responsible for the design of all the principal works on the line, his resident engineer for this section being Robert Brodie. As built, the viaduct consisted of seventeen timber pile driven piers with a superstructure of seventeen timber trusses, of approximately 40 ft. span, and one wrought iron opening span. The working of this opening span, a wrought iron swingbridge of 30 ft. span, is fully described by Isambard Brunel in his life of his father (The life of Isambard Kingdom Brunel, civil engineer, 1870). The mechanical arrangement of the swingbridge, which was mounted on the Swansea abutment, was designed by Brunel's assistant engineer, Lavington Evans Fletcher.

It was replaced by a fixed span at some time during the latter half of the nineteenth century as part of a gradual replacement of all the timber trusses with wrought iron plate girders. There were originally four opening spans on the main line, at Loughor, Kidwelly, Carmarthen and Haverfordwest. Only Carmarthen was rebuilt as an opening span, but this roll-back bridge has not been opened for many years.

The timber used by Brunel was yellow pine from Memel in the Baltic, a high quality 'engineering' timber which had an average life of thirty years or more. The difficulty of obtaining timber of this quality to renew decayed bridge members was the major reason for the total reconstruction of all except one of Brunel's timber viaducts.

The heavy use of the viaduct led to the replacement of the timber superstructure with iron and later steel girders. The timber piles have, however, remained in good condition. The viaduct is currently (July 1981) in the stage of a major renewal and additional timber piles have been driven in and jointed with existing timbers to improve the stability of the piers. This has changed the configuration of the piers from three-pile groups with raking out-members above the walling to four-pile groups with outmembers.

The new timber piles are of pitch pine which has a much shorter life than yellow pine. One of the reasons for the longevity of the original piles is the presence of barnacles and, unlike the Barmouth bridge, no damage has been caused to the viaduct by the teredo ship worm.

Although timber viaducts have come to be regarded as temporary works due to the large scale replacement of timber viaducts by more permanent structures, Brunel did not design his timber viaducts as temporary solutions to engineering problems. I think he would have been surprised, all the same, at the life of the timber piers at Loughor.

Sources

'Report on Loughor Viaduct', Chief Civil Engineers Department, Western Region, British Rail, Paddington.

Article on Loughor viaduct in Railwest (Western Region B.R. staff newspaper), no.7, March 1981.

'Timber works' by L.G. Booth, in The works of Isambard Kingdom Brunel edited by Sir Alfred Pugsley (London, 1976).

Obituary notice of Lavington Evans Fletcher in Minutes of Proceedings, Institution of Civil Engineers, vol.129 (1897), 368-371. (See also his paper on Landore Viaduct, Proc. I.C.E., 14 (1855), 492.)



Loughor Viaduct

(Photographs by Stephen K. Jones, May 1981.)

COAL MINING IN LLANSAMLET PARISH

By B. C. Fagg

(Part 3)

Kirkhouse correspondence and the 1830s

The next insight into the Llansamlet colliery is in the correspondence in the 1830s of William Kirkhouse, colliery agent for the Duke of Beaufort's agent. He lived at Aberdulais and observed the workings on the Duke's land for the collection of royalties. He appears to have applied his engineering training to mining as well as to building the Tennant Canal.

In a letter of 4 February 1832 he wrote "There is talk in the neighbourhood and I believe not far from being correct that there has been some mismanagement of late at Mr Smith's collieries... One pit has been abandoned and pumps taken up and left... even when they could have worked coals there, by what I hear, 10 or 12 years longer to very great advantage, but now the coal is lost for ever. The other pit near Llansamlet church, which is called the Church Pit, in the upper vein they have sunk it too weak and all the roof is crushing in upon them so that they have abandoned it. The lower seam they had abandoned before, but I hear that they are going to try to work that again. I believe he does not at present work any of Lord Jersey's coal and unless he does something soon, he will have no place to work any coal" (30).

If correct, this is an important statement pointing to the failure of a number of workings in the colliery at one time, including Scott's Pit, Round Pit, Gwern Pit, Double Pit and Six Pit, together with major problems at Church Pit in both the 4 ft. and 5 ft. seams. It may well be that the failure at Church Pit was restricting pumping and hauling for most of the pits concerned.

Unfortunately the correspondence does not appear to be continuous, so the next letter is dated 1 December 1834, when Kirkhouse describes better times, and meeting Mr Smith at Llansamlet colliery to discuss the problem of separately identifying Mr Bowen's coal and Lord Jersey's, both of which come up to Church Pit, in order that the correct royalties may be paid. He suggests that there is a need for a new colliery survey in order to identify the coal worked and that it should be kept up to date. "Another thing is the coal used for the engines, Smith's workmen's coal and what is consumed in the iron foundry that they have is all deducted out of the coal worked and is not to be paid for to Lord Jersey."

This appears to be a recurring problem where the coal consumed by Smith's activities escapes being recorded for payment to the Jersey estate. The reference to an iron foundry is interesting because the 1881 25 in. O.S. map (surveyed in 1876) shows the Charles Pit just after closure, with a large number of buildings which could have housed a foundry. Later it became the Foxhole Tinplate Works and eventually the Aber Works.

In December 1834 Kirkhouse was again advising the Duke to keep an eye on coal worked by Smith and to undertake the colliery survey, which he would probably have carried out himself. He proposed to inspect Smith's accounts monthly.

He next writes on 13 January 1835 referring to Smith as "being absent either sporting, visiting, electioneering or such other thing". Smith had apparently given permission to Mr Grenville (of the Morfa copper works) to take water from the canal for his engine so long as it was returned. However, the most interesting point is regarding Smith's plans for a railroad up the Swansea Valley. "Smith told me that it was intended to extend it as far as Graigola Colliery which is worked by Mr Parsons and Logan and Benson and Price... Besides these collieries there are others that could be opened such as Glanebran, Drummu, Cwm Crynach and coals belonging to Mr Lucas which would all come to this railroad, it being more convenient than to go to the Swansea canal as they are all on the eastern side of the river Tawe, and there is no other way of getting the coal out." Kirkhouse refers to the possibility of Benson and Price supporting the railroad, discusses the possible adverse consequences for use of the Duke's Havod works and concludes "I think it must be in his lordship's Interests to grant liberty to Mr Smith if you can agree for wayleave..." He suggests a penny per ton toll for using the railroad.

In January 1837 Kirkhouse states that he has examined Mr Smith's account and finds it correct, and he then produces an interesting set of figures showing the output from the colliery for 1835 and 1836. Some 66,766 tons of coal were taken out of Charles Pit in this one period, and Kirkhouse reports Smith as saying that it could be exceeded in 1837. Of this, almost 10 per cent was used by engines or the workmen. Reference is made to Old Double Pit only producing 57½ tons in the same period for "country sale", which suggests that it has been run down. This is supported by Smith requesting to lease land from the Duke at nearby Pwll Mawr, "part of the old coal banks at Mr Smith's old colliery", for a new spelter works. Kirkhouse advises that it would be better used to produce some income for the Duke and therefore proposed that the land be leased at £5 per annum, particularly as the works will consume 2,000 ways of coal per annum earning a royalty of £50. This became the site of the Llansamlet Spelter Works, opened by Evan John and later owned by Dillwyn & Co., just north of the main railway line.

1840s and later

There is an interesting account in Williams (31) referring to continual problems at Charles Pit. He states that it was abandoned for several years and was full of water when reopened in 1852, when Thomas Powell of Birchgrove Pit was employed as manager. But it is doubtful if the pit closed, because of the difficulty there would then have been with reopening it, particularly if, as Williams says, there was known to have been a problem over water. However, in 1845 difficulties in hauling coal led to the opening of New Pit, at Pentredwr, although this is shown as disused on the 6 in. O.S. map of 1876. The site lies just east of Trallwyn Road, opposite the new Asda supermarket. However, Fairley notes the New Pit as having been sunk in the 18th century by John Smith and it would seem to have given its name to the 5 ft seam. What Williams describes as the sinking of New Pit in 1845 by Robert Mills, the younger, was probably the reopening of the pit and its extension to link up with Charles Pit workings. This would have allowed coal to be hauled up the New Pit shaft and taken by wagon down an incline which went under the Great Western line and joined the Swansea Vale line by the Villers Spelter Works. The pit also seems to have had a level running south-east towards Glanywern where it surfaced. It was used as an entry to the workings.

A plan of 1876, showing Charles Pit at the time of its closure, has levels in the 4 ft seam extending as far as Park Pit, but not New Pit, although it might be the case for the 5 ft. seam (32). The farthest extent of the 4 ft workings is about the old parish road in the south, the Ffendrod stream in the west, and Ynys Allan farm and the Bethel Fault in the east. Unfortunately there is no information on workings in the other seams, but Strahan refers to them as including the 6 ft and 3 ft seams at a depth of 948 feet (33).

On 24 July 1874 The Cambrian reported a mining disaster at Charles Pit in which 19 men were killed, probably by an explosion of gas. Charles Henry Smith had sold out in 1870 to the Foxhole Colliery Co., who then sold to the Landore Siemens Steel Co. who owned the pit until it finally closed in 1876. Henry Lewis Colley was manager at the time. Smith also sold his interest in Round Pit to Jones & Saunders in 1872/73, who also bought Emily Pit. Park Pit was sold to the Foxhole Colliery Co. in 1872, who in turn sold to the Landore Siemens Steel co. in 1877/78, who were then in the process of buying pits to provide coal for their large works (34).

After this date, Charles Pit became the Foxhole Tinplate Works on the 1899 25 in. O.S. map, with spoil heaps as the only remaining sign of its mining history. Round Pit is shown as a brickworks, possibly the source of the bricks marked "White/Llansamlet". Gwern Pit is shown as disused, but such is the nature of mining that under the title of Samlet Colliery the pit was working again in the 1920s. Park Pit may also have been working, but it is doubtful if Scott's Pit was still in use despite its headframe, beam and rods being shown on a picture postcard of about 1907. It probably only remained for ventilation and emergency access.

Little is known of the social history of the mining community in Llansamlet. Between 1801 and 1831 the population increased from 2,567 to 3,187. but in the next twenty years it jumped by 25 per cent to 4,276 in 1851, reflecting a growth in population brought about by the immigration of workers to the parish to work in industry and mining. The census of 1851 also shows a quadrupling of the male population in the same period. In this context it is informative to look at the

Register of Marriages at the parish church, because the census does not refer to miners as a separate category. The occupation of the bridegroom was given as collier in about 37 per cent of the marriages between 1837 and 1844, and in one year 55 per cent (17 marriages) were in this category. A similar picture is derived up to about 1864 when the number of marriages remained constant but the number of colliers declined to about 28 per cent in the period 1864-76, and to 16 per cent in the years prior to the first World War. This analysis probably says as much for the relative strength of church and chapel support, but it does reflect the rise and fall of mining in the area, and indicates that it was an important source of employment, even allowing for the fact that surface workers were not included in the figures.

Mining had been declining in Llansamlet in the latter part of the 19th century, due to the seams being worked out and the serious problem of drainage, but after 1870 large-scale working came to an end. Other collieries to the north were still active, including Birchgrove, Garth and Sisters Pits, with Cwm and Tydraw towards Kilvey. On the O.S. map of 1897 only Felin Fran Pit appears, probably the only pit in the area to have been extensively developed in the 20th century. In 1965 Garth Pit closed, the last active colliery in the County Borough of Swansea.

Mining in Llansamlet helped to establish a coal export trade from Swansea and further analysis could show the proportion of the trade it took. It was also directly associated with the growth of local industry, drawing in capitalists from England and thus repeating the pattern found elsewhere in the Principality. There was also backward integration of local industries into mining to secure supplies of coal. However, in comparison with other mining areas, the period of deep mining was relatively short and undistinguished. It was not in the forefront of new technology, and virtually died away before the nationalisation of the coal industry.

Acknowledgments

I would like to thank Messrs P.G. Rattenbury, G.F. Gabb, P.R. Reynolds and R.J. Hilliar for supplying references, and Mr P.R. Reynolds for his helpful comments and suggestions.

References

30. Jordan manuscripts, including papers of William Kirkhouse, 1830-1839. Swansea Central Library, MC 466.
31. W.S. Williams, Hanes a hynafiaethau Llansamlet (Dolgellau, 1908)
32. 'Plan of 4 ft workings, Charles Pit, Llansamlet, the property of Landore Siemens Siemens Steel Works' (1876). Plan deposited at the NCB Abandoned Mines Record Office, Ystrad Mynach.
33. A. Strahan, The geology of the south Wales coalfield. Pt 8: the country around Swansea (London, 1907), an excellent account of the geology of the area.
34. T.F. Brown 'On the south Wales coalfield', Proceedings of the South Wales Institute of Engineers, 9 (1874/75), 59-129. pp.117-118 include information on Landore Siemens Steelworks.

Appendix

Mine Workings in Llansamlet Parish: a tentative list

COLLIERY	MAP REF.	IN USE	CEASED	SEAMS	DEPTH	FIRST OWNER
1. Church	684977	1786	1876	4'	180'	John Smith
2. Charles	685977	1824	1876	4' 5' 6'	950'	Henry Smith
3. Round	696976	1806	1876?	4' 5'	240'	Charles Smith
4. Gwern/ Cae Pridd/ Samlet	695977	1750/1800	1930?	4' 5' 6'		Chauncy Townsend?
5. Cwm, Winchwen	681961	c.1800	c.1876	5'	330'	
6. Cwm	686970	1786				
7. Cwm Level		c.1785		5'		
8. Pwll Mawr	676963	1771	1828	6'	489'	Chauncy Townsend
9. Double	677963	c.1775	1828/37	6' 3'	579'	John Smith

10. Marsh/ Forest	679971	c.1846	1875/98	5'	306'	Glasbrooks
11. Fourth	--					
12. Fifth	687967					
13. Six	681969	1771/1800		5'		John Smith
14. Seven	686969					
15. Eight	689965					
16. Garden	670969	b80969 c. 1771		4' 5'		John Smith
17. Park	684971	c.1850	1880	4' 5'		
18. Watch	698979	c.1751	1773/86	4'		Chauncy Townsend
19. Oak	69-97-	c.1751	1773/86	4'		Chauncey Townsend
20. Pentregaseg	685955?	1838?				Sims & Little
21. Trallwyn	695969	c.1808				
22. Pwll Bach	678956					
23. Talywenda	701964					
24. Bonymaen	678953?	1707				
25. Crymlyn	702965			5'		
26. Tir Isaf	683943					
27. Emily	703981	1840	1897/1914	4' 5' 6' &c.		C.H. Smith
28. Scott/ Venture	698984	1819	1838/1930	4' 5' 6' &c.		John Scott
29. Felin Fran	692985	1898	1965			
30. Brothers	699989					
31. Birchgrove	704989	1845	c.1930			
32. Wolf	683940					
33. Colt	686966					
34. Stone	--	c.1771		5'		
35. White	686962	c.1813	c.1876			
36. Sisters	702999	1870/73	1932			
37. Little	--	Pre-1707				Thomas Mansel
	--	Pre-1707				Thomas Mansel
39. Pydew	--	Pre-1707				Thomas Mansel
40. Kilvey Mont		1823				John Penrose
41. New	695965	1771	1876/1924	5'		John Smith
42. East	701979	c.1751		4'		
43. Heol Ddu/ Coed Saeson	705976	c.1750	1887	6'		Gregory/Morgan
44. Middle Bank	672954	c.1716				Popkins
45. Mill	670954?	c.1750	Pre-1830			Chauncey Townsend
46. Upper Bank	672956?	c.1750	Pre-1830			Chauncey Townsend
47. Tydraw	684940		c.1897	6'		
48. Fowlers	683949		c.1879			
49. Llanerch	681946					Thomas Mansel
50. Elwyn Heiernin	673946					
51. Glanywern	695958	c.1716				Thomas Mansel
52. Danygraig		Pre-1874	1887			Charles Lambert

An explosion at Scott's Pit, 1824

"Explosion of Fire Damp. One of those melancholy accidents occasioned by the explosion of fire-damp occurred at the Old Church Pit Colliery, near Swansea, on Wednesday last (i.e. 14 April); whereby four men lost their lives, eighteen have been dreadfully scorched and lacerated. and four have received compound fractures. It appears that the colliers received strict orders from the agent not to approach a certain part of the pit; but disregarding these injunctions, the fatal result was as above described."

(From The Cambrian, 17 April 1824)

RAILWAYS IN SOUTH WALES

Mr Robert Barnes will give a short course of lectures in the Royal Institution of South Wales (Swansea Museum) during March on Railways of South Wales. The course has been arranged by the Department of Extra-Mural Studies.

Date and time: 1.10 to 1.55 p.m., Tuesdays 9 - 30 March 1982

Tickets: £1-00 each, admitting the holder to all four lectures, can be obtained either from Swansea Museum or from the Department of Extra-Mural Studies, Berwick House, 6 Uplands Terrace, Swansea SA2 0GU. Cheques should be made payable to 'University College of Swansea'.

The talks will trace the history of railways in south Wales from the closing years of the eighteenth century to the present day. The course will cover the development of railways in industrial and rural south Wales; inter-company rivalries and the spirit of competition associated with the construction of many lines and systems; the importance of railways to the economy and society of the region; and the legacy in terms of physical remains left in south Wales by the railway age.

COKE AND CHARCOAL BLAST FURNACES

Last November members enjoyed a stimulating and well-presented lecture by Mr Philip Riden of University College, Cardiff on 'The transition to coke smelting in the south Wales iron industry'. After the meeting several members expressed the hope that Mr Riden would publish the text of his lecture so that the arguments and evidence he presented could be considered at leisure. Members may like to know that an article by Mr Riden has already appeared which goes a long way towards meeting this request, viz., 'Eighteenth century blast furnaces: a new checklist', in Historical Metallurgy 12 (1) 1978, 36-39. Basically it consists of a series of tables showing:

1. Total blast furnace sites and output, 1530-1709
2. Pig iron output, 1720-1789
3. Pig iron output, 1790-1870
4. Blast furnaces, 1720-1790, with type of fuel (charcoal or coke) and dates of erection and/or closure.

IT SOUNDS FAMILIAR

"Undermining the historian's work. The perils facing historians can be formidable. Over the past three years a librarian has been sorting and cataloging a mass of documents at the North of England Institute of Mining and Mechanical Engineering in Newcastle upon Tyne. These archives, dating back to the 15th century, constitute one of the world's best collections of papers on the history of mining. Recently a £130,000 appeal was launched to finance completion of the work, along with restoration and re-binding of the documents. When the district council in the Durham pit town of Easington discussed the project, one member said they did not want to be reminded of what mining was like when it was a private industry. The council coughed up £10."

(Daily Telegraph, October 1981)

AN INTERESTING FIND IN 1873

"A very interesting and curious discovery was made by Mr John Glasbrook on Wednesday (i.e. 19 February), "in an old adit level at Pwlllycwm colliery, near Landore. The men are sinking a new colliery there and on Wednesday in an old adit level, filled with rubbish, came across two old wooden shovels, evidently used by the miners hundreds of years ago. The handles of the shovels is of ash, the blades of oak (still as hard as steel). There is not a particle of iron even in the fastenings, and those implements of trade must have been left where now found at least 200 years ago. The lease of the collieries in question was first granted to Lockwood, Cotton and Lord Elliott in 1750, and they were continued to be worked until 1801... The spot where the shovels were found has not been opened for at least 130 years... The shovels are to be deposited in the Royal Institution of South Wales."

(The Cambrian, 21 February 1873)

OBITUARY

Mr Harry Green. All his friends were saddened to learn of the death on 20 December last of Mr Harry Green. He was an enthusiastic member of the Neath Antiquarian Society and also a member of this society, although ill-health prevented him from taking an active part in our affairs, Nevertheless he always showed a real interest and was a great source of help and encouragement to the writer of this memoir - as indeed he was to many other local amateur historians.

After graduating in English at the University College of Swansea, Harry Green made his career in journalism, at first in newspapers, including the Western Mail and South Wales Evening Post, but later in radio and television. He was for many years the editor of the popular series Dr Finley's casebook.

It was his training as a journalist, added to his enthusiasm for local history, which proved such a powerful combination and led to much valuable work in the field of local history and archaeology in the Neath area. His interest in local history provided him with a wide variety of themes, and his skills as a first-rate journalist allowed him to make the most of whatever topic it was that captured his attention: he had a 'nose' for original sources of information, persistence in tracking them down, a healthy scepticism of any unverified assertion and an intolerance of second-rate work in any form. And finally, a life time's experience of using words and presenting a subject to its best advantage enabled him to write up his work effectively and persuasively. Harry's articles were certainly never easy reading: they demanded constant attention, both because of the importance of their subject matter, and because of the tight reasoning he employed in marshalling his evidence and making out his case, and the concise style he used without any padding or wasted verbiage.

His interest at first lay in prehistoric and medieval archaeology, and he was responsible for several important discoveries, including an early iron age hill fort near Melincourt and the remains of a medieval settlement on Resolven Mountain. In retirement he developed an interest in the industrial history of Neath in the eighteenth and nineteenth centuries, and every year the Transactions of the N.A.S. contained definitive articles from his pen on topics such as Parsons' tramroad, Venallt ironworks and Resolven colliery (1977); Penrhiwtyn ironworks, Melincryddan copperworks and Briton Ferry ironworks (1978); Gnoll House and Eaglesbush colliery (1979); and Melincwrt furnace and Neath shipping (1891). At the time of his death he was working on the early history of Neath Abbey ironworks. The fact that the revived Transactions in the last few years have proved so popular and represent such a solid achievement for their society is due in no small part to Harry's work, both as a contributor and as a meticulous assistant editor who put in many hours on the humdrum chores of proof-reading, indexing and the like.

Local history in this part of the world is poorer for the passing of Harry Green, and all his friends and colleagues regret their loss.

P.R.R.

RECENT LITERATURE

S.R. Hughes, 'The development of British navigational levels', Journal of the Railway and Canal Historical Society 27 (2) 1981, 2-9.

Navigation levels were underground waterways that did not form part of a through route. Their primary function was drainage and to transport coal, or other minerals, out of a mine. In this article, of his usual competent standard, Stephen Hughes looks at their history and development. He identifies two different groups, one deriving from Swansea, the other from Worsley in Lancashire. What is particularly interesting for us in south-west Wales is that the earliest navigation level of all appears to have been Clyndu, at Morriston, started in 1749. The nine levels he identifies in south Wales all appear to be descended from this one. There do not appear to be any major differences in design or working between the two schools of practice, and Hughes concludes that there is "the ghost of a suspicion" that they "might not have been quite unrelated". He also gives a list of sites and full source references.

RECENT LITERATURE

NEATH ANTIQUARIAN SOCIETY. Transactions, 1980-81

After missing a year the Neath Transactions make a welcome reappearance with a wealth of useful and interesting articles. Pride of place must go to two contributions by the late Harry Green, 'Melin-y-Cwrt Furnace' and 'Ships of old Neath, Neath Abbey and Briton Ferry'. The former is vintage Harry Green, and a fine piece of industrial archaeology: documentary evidence, fieldwork and common sense are combined to trace the water supply for the furnace before its closure in 1808. Conversion from charcoal to coke is dated to the 1790s, making it a late but not the latest charcoal survivor. Harry Green's other article is an exhaustive list of ships built or registered at Neath in the period 1809-1890 with many illustrations: it will form a valuable source of reference.

Other contributions include articles by Alan Hayward on the Parsons family of Clydach (coalowners) and on David Thomas of Yniscedwyn ironworks; and two railway articles from Paul Reynolds, one on an abortive tunnel under the river Neath in the 1880s, the other on an episode in the railway politics game which led to Brecon being cut off from Swansea and Neath for about a week in 1889.

(£2-50. Available from W.H. Smith in Neath or Swansea.)

AFAN UCHAF. Vol.4, 1981

The journal of the Cymmer Afan and District Historical Society continues to make its regular appearance every year and to contain worthwhile articles on the history of the upper Afan valley. It also represents a good example of how a small society can produce an attractive-looking journal without a vast outlay of money by means of good litho printing from typescript prepared on an electric typewriter. Neat layout and a little thought for the reader can go a long way towards making up for a lack of the financial resources needed for a conventional letterpress job: indeed some people may prefer the style of Afan Uchaf to unimaginative second-rate letterpress work.

As usual, the journal relies heavily on its editor, the Revd Roger Lee Brown: let us hope that his departure from Glynccorrwg for Tongwynlais will not have an adverse effect on his involvement with the Cymmer society. However, so far as the industrial history of the area is concerned, it is other contributors who have supplied the material in the present issue. Clive Smith describes 'The Gelli Houses', an interesting terrace of single-storey miners' cottages and one of the few examples of its type still left. From the same pen comes a general account of 'The development of the upper Afan valley, 1871-1971' which is centred on the coal industry naturally enough. Jack Watts conducts 'A ramble over the valley mountains', again with the coal industry to the fore, and John Hosegood tells the story of 'The Great Western Colliery, Avon Colliery, Blaengwynfi'.

(£1-65, including postage, from the Revd R.L. Brown, The Vicarage, 1 Merthyr Road, Tongwynlais, Cardiff CF4 7LE.)

GOWER. Vol.32, 1981

Although this issue of Gower contains the usual selection of items on Swansea and Gower, the only article with a bearing on industrial history or archaeology is Paul Reynolds' 'Two Swansea collieries: Cefngyfelach and Tirdonkin', which is a history of these two related pits from the sinking of Cefngyfelach in the 1880s to the closure of Tirdonkin in 1928. It also looks at some aspects of the working of the two collieries.

Richard Chadwick, 'Copper: the British contribution', Chemistry in Britain 17 (8) 1981, 369-373

Copper-smelting in Britain commenced in the 16th century. For a variety of reasons south Wales, and especially Swansea, soon became the centre of the industry and during the nineteenth century occupied a dominant position in the industry throughout the world. The present article represents a brief summary of the industry in Swansea and its district, mainly in the 19th century, and appears to be based largely, although not entirely, on secondary sources.